

This listing of claims will replace all prior versions, and listings, of claims in the application. All amendments are made without prejudice or disclaimer.

Listing of Claims

1. (Original) A cross-reactive antibody, which specifically inhibits or blocks the mammalian Toll-like receptor 2 (TLR2)-mediated immune cell activation by specifically binding to the C-terminal portion of the extracellular domains of at least human and murine TLR2.

2. (Previously Presented) The antibody of claim 1, wherein the antibody is selected from a polyclonal antibody, a monoclonal antibody, a humanized antibody, a chimeric antibody, or a synthetic antibody.

3. (Currently Amended) The antibody of claim 1, wherein the antibody specifically binds through its variable regions of the heavy- and light chain comprising the amino acid sequence as depicted in SEQ ID NO:1 and/or 2 NO:6 and/or 7, or a variant thereof.

4. (Previously Presented) The antibody of claim 1, wherein said antibody is linked to a pharmaceutical agent, and/or to a detectable agent.

5. (Previously Presented) An isolated nucleic acid coding for the variable regions of the heavy and/or light chain of the antibody of claim 1.

6. (Currently Amended) An isolated nucleic acid which comprises the sequence of SEQ ID NO: 1 and/or 2 or variants thereof, wherein the variants are selected from:

a nucleic acid having a sequence that hybridizes under moderately stringent conditions to a nucleic acid which comprises the nucleic acid sequence of SEQ ID NO: 1 and/or 2 or its complement and encodes a protein region that specifically binds to the C-terminal portion of the extracellular domains of at least human and murine TLR2; and

a nucleic acid having a sequence that encodes for the amino acid sequences of SEQ ID ~~NO: 1 and/or 2~~ NO: 6 and/or 7 or a variant thereof that specifically binds to the C-terminal portion of the extracellular domains of at least human and murine TLR2.

7. (Original) The isolated nucleic acid of claim 6, which comprises at least the sequence of nucleic acids No. 172 – 201, 244 – 294 and/or 385 – 417 of SEQ ID NO: 1, or of nucleic acids No. 130 – 174, 220 – 240 and/or 337 – 363 of SEQ ID NO: 2, or a part thereof.

8. (Previously Presented) The isolated nucleic acid of claim 5, said isolated nucleic acid further comprising a nucleic acid specifying one or more regulatory sequences operably linked thereto.

9. (Previously Presented) A vector, which comprises the nucleic acid sequence of claim 5.

10. (Previously Presented) The vector of claim 9, which is an expression vector and further comprising one or more regulatory sequences operably linked to said nucleic acid.

11. (Previously Presented) The vector of claim 9, which is a plasmid or a retroviral vector.

12. (Previously Presented) A host, which has been transformed with the vector of claim 9.

13. (Original) The host of claim 12, which is a eukaryotic cell.
14. (Original) The host of claim 13, which is a mammalian cell, plant cell, yeast cell or an insect cell.
15. (Original) The mammalian cell of claim 14, which is a CHO, COS, HeLa, 293T, HEH or BHK cell.
16. (Original) The host of claim 12, which is a prokaryotic cell.
17. (Original) The host of claim 16, which is E.coli or Bacillus subtilis.
18. (Previously Presented) A pharmaceutical composition comprising an antibody of claim 1, a nucleic acid encoding the variable regions of the heavy and/or light chains of said antibody or a vector comprising said nucleic acid and a pharmaceutically acceptable carrier.
19. (Original) The pharmaceutical composition of claim 18, which further contains one or more pharmaceutically active ingredients.
20. (Previously Presented) The pharmaceutical composition of claim 19, wherein the one or more pharmaceutically active ingredients are selected from antibiotic agents, antiinflammatory agents, and / or agents blocking further pattern recognition receptors.
21. (Original) The pharmaceutical composition of claim 20, wherein the agent is specific for TLR3, TLR4, TLR5, TLR7, TLR8, and/or TLR9.
22. (Previously Presented) A hybridoma which produces a monoclonal antibody according

to claim 2.

23. (Previously Presented) A method of preventing and/or treating a TLR2-mediated process in a mammal, comprising administering the antibody of claim 1, a nucleic acid encoding the variable regions of the heavy and/or light chains of said antibody or a vector comprising said nucleic acid or a composition comprising any thereof and a pharmaceutically acceptable carrier to said mammal in an effective amount to prevent and/or treat said TLR2-mediated process.

24. (Previously Presented) The method of claim 23, wherein the individual dose administered to the mammal is between 1 and 100 mg/kg body weight.

25. (Previously Presented) The method of claim 24, wherein the individual dose is administered as a single dose to the mammal.

26. (Previously Presented) The method of claim 25, wherein the individual dose is administered repeatedly to the mammal.

27. (Previously Presented) The method of claim 24, wherein the dose is between 10 and 60 mg/kg body weight.

28. (Previously Presented) The method of claim 27, wherein the dose is between 20 and 40 mg/kg body weight.

29. (Canceled)

30. (Previously Presented) The method of claim 23, wherein the TLR2-mediated process is selected from rheumatoid arthritis, vascular arthritis, and inflammatory bowel disease.

31. (Original) A screening method for identifying an antagonist capable of inhibiting or blocking TLR2, comprising the steps of:

- (a) generating or providing mammalian TLR2,
- (b) contacting said TLR2 with a candidate compound,
- (c) detecting the inhibition or blocking of said compound by a suitable detection method,
- (d) selecting a compound that has been tested positive in step (c),
- (e) optionally repeating steps (a) – (d) with a suitably modified form of the compound of step (d).